

ABSTRACT OF THE DISCLOSURE

SiCOI TYPE COMPOSITE SUBSTRATE MANUFACTURING METHOD COMPRISING
AN EPITAXY STEP

The invention relates to an SiCOI type composite substrate manufacturing method comprising the following steps :

- 5 - supply of an initial substrate comprising an Si or SiC support (1) bearing a layer (2) of SiO₂ whereon a thin layer (3) of SiC is transferred,
 - epitaxy of SiC (4) on the thin layer (3) of SiC.

The epitaxy is conducted at the following temperatures :

- 10 - from 1450°C to obtain 6H or 4H polytype epitaxy (4) on a transferred thin 6H or 4H polytype layer (3) respectively, if the support (1) consists of SiC,
 - from 1350°C to obtain 3C polytype epitaxy (4) on a transferred thin 3C polytype layer (3), if the support (1)
15 consists of Si or SiC,
 - from 1350°C to obtain 6H or 4H polytype epitaxy (4) on a transferred thin 6H or 4H polytype layer (3) respectively, if the support (1) consists of Si.

Figure 1